MECHANICAL DATA SHEET: VESSEL

PLANT ITEM No.
24590-LAW-LFP-VSL-00004

Project:	***RPP-WTP***	P&ID:	***24590-LAW-M6-LFP-P0003; 24590-LAW-M6-LFP-P0004***
Project No:	***24590***	Process Data Sheet:	~~***Deleted***~~ 1 3/7/05
Project Site:	***Hanford***	Vessel Drawing	***24590-LAW-MV-LFP-P0002***
Description:	***Melter 2 Feed Vessel***		

Reference Data

Charge Vessels (Tag Numbers)	***Not Applicable***
Pulsejet Mixers / Agitators (Tag Numbers)	***LFP-AGT-00004***
RFDs/Pumps (Tag Numbers)	***LFP-PMP-00013, LFP-PMP-00014, LFP-PMP-00015, LFP-PMP-00016, LFP-PMP-00017, LFP-PMP-00018, LFP-PMP-00004***
Spray Nozzles	***LFP-NOZ-00008, LFP-NOZ-00009, LFP-NOZ-00010***

Design Data

Quality Level		***CM (Note 4)***	Fabrication Specs	***24590-WTP-3PS-MV00-TP001***		
Seismic Category		***SC-III***	Design Code	***ASME VIII Div 1***		
Service/Contents		***LAW Melter Feed***	Code Stamp	***Yes***		
Design Specific Gravity		***1.90***	NB Registration	***Yes***		
Maximum Operating Volume	gal	***7,689***	Weights (lbs)	Empty	Operating	Test
Total Volume	gal	***9,123***	Estimated	***44,500***	***164,600***	***120,800***
			Actual *			

Inside Diameter	inch	***132***			Wind Design	***Not Required***	
Length/Height (TL-TL)	inch	***126***			Snow Design	***Not Required***	
		Vessel Operating	Vessel Design	Coil/Jacket Design	Seismic Design	***24590-WTP-3PS-MV00-TP002*** ***24590-WTP-3PS-FB01-T0001***	
Internal Pressure	psig	***0.07***	***15***	***None***	Seismic Base Moment *	ft*lb	
External Pressure	psig	***4.09*** 1	***FV***	***None***	Postweld Heat Treat	***Not Required***	
Temperature	°F	***98***	***150***	***None***	Corrosion Allowance	inch	***0.04 Top Head*** ***0.125 Shell & Btm Head***
Min. Design Metal Temp.	°F	***40***			Hydrostatic Test Pressure *	psig	

Note: Please note that source, special nuclear and byproduct materials, as defined in the Atomic Energy Act of 1954 (AEA), are regulated at the U.S. Department of Energy (DOE) facilities exclusively by DOE acting pursuant to its AEA authority. DOE asserts, that pursuant to the AEA, it has sole and exclusive responsibility and authority to regulate source, special nuclear, and byproduct materials at DOE-owned nuclear facilities. Information contained herein on radionuclides is provided for process description purposes only.

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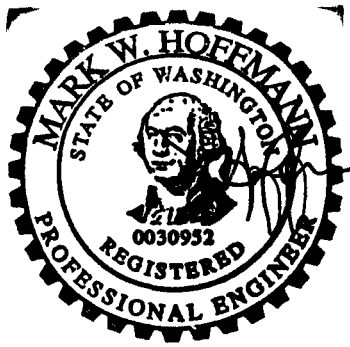

3/7/05

EXPIRES 12/10/06

This bound document contains a total of 2 sheets.

Rev.	Reason for Revision	By	Checked	Review	Approved	Date
1	Issued for Permitting Use					3/7/05
0	Issued for Permitting Use	J. Jackson	S. Lee	C. Slater	E. Isern	12/29/03

	MECHANICAL DATA SHEET: VESSEL	PLANT ITEM No. 24590-LAW-LFP-VSL-00004

Materials of Construction

Component	Material	Minimum Thickness / Size	Containment
Top Head	***SA-240 316 (Note 2)***	***See Drawing***	***Auxiliary***
Shell	***SA-240 316 (Note 2)***	***See Drawing***	***Primary***
Bottom Head	***SA-240 316 (Note 2)***	***See Drawing***	***Primary***
Support	***SA-240 304 (Note 2)***	***See Drawing***	***N/A***
Jacket/Coils/Half-Pipe Jacket	***N/A***	***N/A*** 1	***N/A***
Internals	***SA-240 316 (Note 2)***	***See Drawing***	***Thermowells Primary***
Pipe (Seamless)	***SA-312 TP316 Seamless (Note 2)***	***See Drawing***	***Note 3***
Forgings/ Bar stock	***SA-182 F316 (Note 2)***	***See Drawing***	***N/A***
Gaskets (O Ring)	***EPDM O-Ring***	***N/A***	***N/A***
Bolting	***SA-193 B8M / SA-194 8M***	***N/A***	***N/A***

Miscellaneous Data

Orientation	***Vertical***	Support Type	***Skirt***
Insulation Function	***Not Applicable***	Insulation Material	***Not Applicable***
Insulation Thickness (inch)	***Not Applicable***	Internal Finish	***Welds descaled as laid***
		External Finish	***Welds descaled as laid***

Remarks

- ***To be determined by the vendor.***

Note 1: Deleted.

Note 2: Material shall have Carbon Content of 0.030% Max. Non-welded items are excluded from this requirement.

Note 3: Nozzle necks below normal operating level are Primary, others Auxiliary. See 24590-WTP-3PS-MV00-TP001 for NDE. 1

Note 4: Additional NDE requirements should be as per 6.4 of 24590-WTP-3PS-MV00-TP001.

Note 5: Contents of this document are dangerous waste permit affecting. 1